

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-005639**Date Inspected:** 26-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Hu Wei Oing**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA Inspector observed and/or found the following:

OBG Bay 13: QA Inspector performed ultrasonic (UT) verification testing of OBG segment complete joint penetration (CJP) butt joints in segment lift 1BE. Welds tested were SSD47-PP011-129, SSD47A-PP011-129, Seg 006B-001, Seg 006B-002, Seg 006C-001, and Seg 037A-004. QA Inspector performed UT lot testing on the following three welds SSD45A-PP10.5-007, SSD47A-PP11-007, and SSD45A-11.5-007 representing a lot of ten welds. The remaining seven welds not UT tested were SSD45-PP10.5-007, SSD47-PP11-007, SSD45-PP11.5-007, SSD49-PP12-007, SSD49A-PP12-007, SSD45-PP12.5-007, and SSD45A-PP12.5-007. The Ultrasonic Testing (UT) was performed to verify that 10% of the weld meets the requirements of the contract documents and AWS D1.5-2002 after ZPMC QC UT acceptable inspection. The welds and base metal were scanned utilizing a Krautkramer Branson USN 58L #01WHB1. QA Inspector performed a base metal lamination check using a 25mm diameter 2.25 MHz transducer and a shear wave scan using a 20mm x 15mm 2.25 MHz transducer on a 70 degree angle wedge from face A. For details please see the ultrasonic testing report TL-6027 dated 16 Feb, 2009. QA Inspector found the welds inspected to be in compliance with AWS D1.5 2002 Table 6.3 and the contract documents.

OBG bay 2 Caltrans Quality Assurance (QA) Inspector observed five (5) floor beam cutouts for bottom plate rib stiffener (RS) penetrations had been ground on one side to facilitate fit up of floor beam to bottom plates. The standard drawing SD11 detail 11J lists the floor beam cutout width dimension to be 60mm. Bottom plate 309A

WELDING INSPECTION REPORT

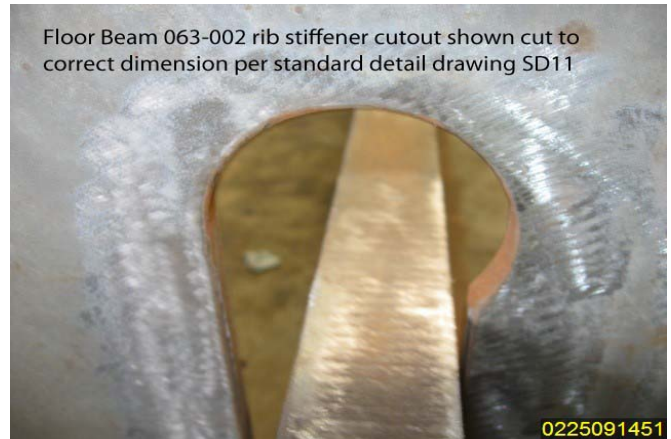
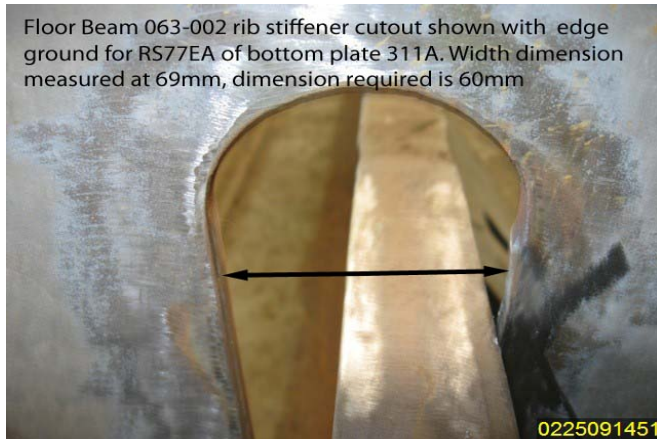
(Continued Page 2 of 2)

RS77E has a cutout width dimension of 68mm, RS78E cutout width dimension of 66mm. Bottom plate 311A RS77EA cutout width dimension of 69mm, RS87GA cutout width dimension of 65mm, and RS85C cutout width dimension of 65mm due to ZPMC grinding. QA Inspector asked ZPMC QC CWI Nu Wei Oing if ZPMC had written approval to grind and change the dimensions of the floor beam cutouts. QC CWI explained ZPMC had no written approval to make the change. Please see incident report dated 26 February, 2009 for further details. Representative pictures shown below.

Unless otherwise noted, all work observed on this date appears to be in general compliance with the applicable contract documents.

Summary of Conversations:

Conversations noted in items above.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
